

### **REMARKS**

The Official Action mailed September 19, 2007, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on December 8, 2003; August 23, 2004; and January 21, 2005.

Claims 6-30 are pending in the present application, of which claims 6, 12, 17 and 23 are independent. Claims 17 and 23 have been amended to better recite the features of the present invention. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 6-30 as obvious based on the combination of U.S. Patent No. 4,231,639 to Banda; U.S. Patent No. 4,878,742 to Ohkubo; and U.S. Patent No. 5,250,214 to Kanemoto. Regarding independent claims 6 and 12, the Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness. Regarding independent claims 17 and 23, the Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

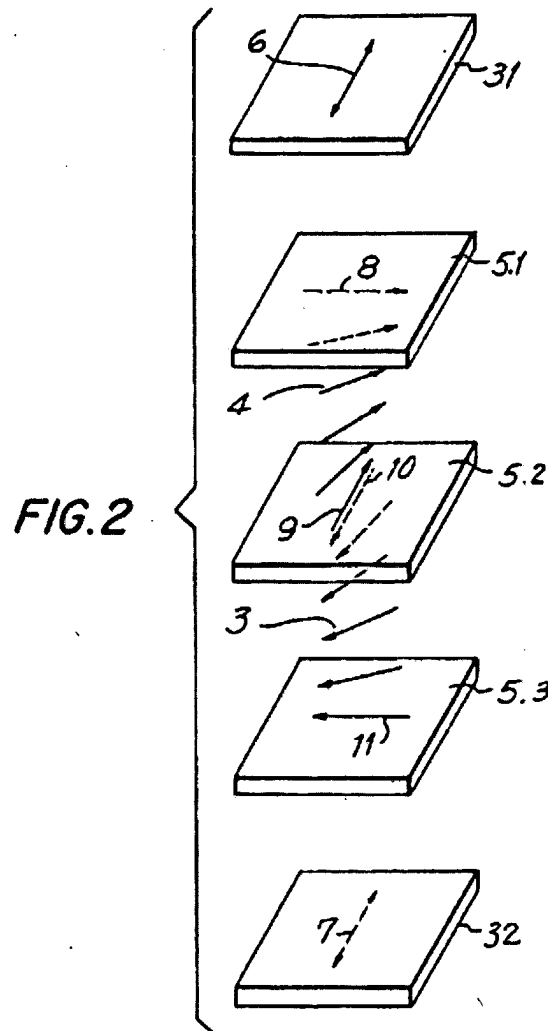
As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally

available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Independent claims 6 and 12 recite and independent claims 17 and 23 have been amended to recite a liquid crystal layer in contact with orientation films, each of a pair of substrates provided with only one of the orientation films, and the orientation films having antiparallel orientation directions to each other. Also, claim 12 recites a liquid crystal layer provided between a pair of substrates, the liquid crystal comprising molecules aligned substantially in one direction throughout a thickness of the liquid crystal layer. For the reasons provided below, Banda, Ohkubo and Kanemoto, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

The Official Action asserts that Banda teaches "a pair of orientation films provided adjacent to and between said pair of substrates respectively and having anti-parallel orientation directions to each other (col. 2, lines 62-64)" (page 3, Paper No. 20070915). The Applicant respectfully disagrees and traverses the assertions in the Official Action.

Although Banda appears to generally disclose the concept of anti-parallel orientation directions at column 2, lines 62-64, Banda does not teach or suggest a pair of orientation films on a pair of substrates having antiparallel orientation directions to each other, where the orientation films are in contact with a liquid crystal layer. Rather, for example, Banda discloses that a direction 10 on a bottom surface of the plate 5.2 is anti-parallel to a direction 9 on an upper surface of the plate 5.2 (column 4, lines 4-7; Figure 2; reproduced below).



The plates 5.1 and 5.2 in Figure 2 do not have orientation films that have antiparallel orientation directions to each other. Rather, Banda appears to teach, for example, that a liquid crystal layer 4 is in contact with plates 5.1 and 5.2, and a rotation of 90° between plates 5.1 and 5.2. However, Banda fails to teach or suggest orientation films having antiparallel orientation directions to each other, where the orientation films are in contact with a liquid crystal layer.

Therefore, the Applicant respectfully submits that Banda, Ohkubo and Kanemoto, either alone or in combination, do not teach or suggest a liquid crystal layer in contact


with orientation films, each of a pair of substrates provided with only one of the orientation films, and the orientation films having antiparallel orientation directions to each other.

Also, with respect to claim 12, it appears that Banda fails to teach or suggest a liquid crystal layer provided between a pair of substrates, the liquid crystal comprising molecules aligned substantially in one direction throughout a thickness of the liquid crystal layer. The Official Action does not appear to address these features, and the Applicant respectfully submits that the alleged combination of Banda, Ohkubo and Kanemoto does not teach or suggest these features.

Since Banda, Ohkubo and Kanemoto do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

  
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